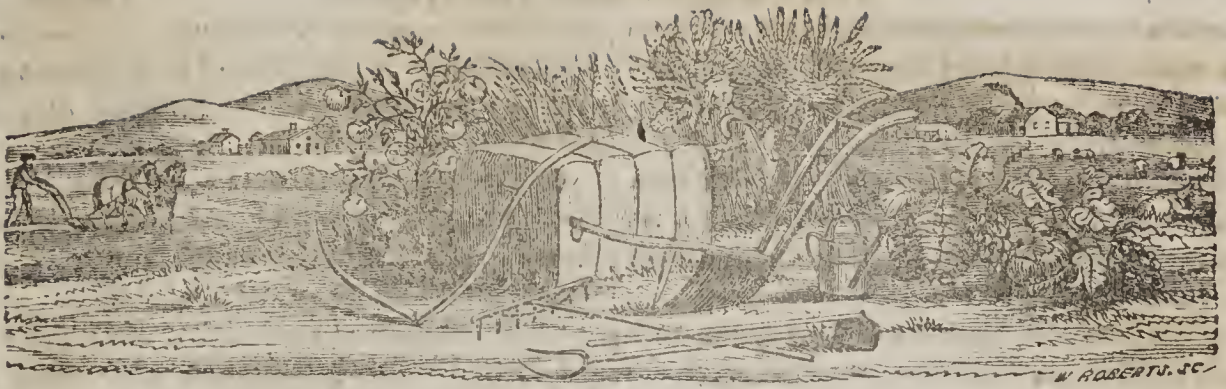


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# THE FARMER AND PLANTER.

Devoted to Agriculture, Horticulture, Domestic and Rural Economy.

Vol. VI.

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No. III.

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## Address

OF R. F. W. ALSTON, ON SEA COAST CROPS.

(Continued from our Last.)

You have invited me to address you on "the Culture of Sea Coast Crops." A subject fruitful in itself, abounding in details, and sufficiently interesting to those of us whose business it is to cultivate the great staples. The information which I have been able to collect, as to one staple, together with all that I may have acquired in the culture of the other, is entirely at the service of the Association. But all the detail cannot be given here.

Both Cotton and Rice were at first grown by few persons. As they profited largely by the peculiar culture, they expended in hospitalities the revenues which accrued. Early in the present century a single estate in Georgia is said to have yielded a crop (600 bags) of Sea Island Cotton worth \$100,000 and upwards. Rice has been known to command a ready market at thirty shillings per cwt. The planter, in those distant days, who made good crops, doubled his capital in a few years. I had the statement from the planter himself, that in one of those years the proceeds of the labor of each worker, on one of his plantations,\* enabled him to add another laborer to his estate. During the war of 1812, a good deal of salt was made on the seaboard. It commanded, a year or two after the war, \$6 a bushel!

These monopolies have no more any existence. They are now matters of history merely. In republican compensation, the same cau-

\*Waterford, a small plantation lying in the best pitch of tide on Waccamaw. It belonged at that time to the late Benjamin Allston.



ses which have reduced the profits of the few, have tended to equalize with them the incomes of the many.

Of Salt, an article of necessary consumption, which had been manufactured on our coast more than a hundred years, there are now, none so poor to "boil a kettle."

Of Cotton, the culture far from being confined to Georgia has been extended over the fertile region, embracing with the exception of Maryland, Virginia, Kentucky and Missouri, the Southern and South-Western States. And in the production of Rice both the Carolinas, Georgia and Louisiana, are engaged. It is grown for domestic consumption in Mississippi, Florida, and Texas, and nearly every where else where may be found a settlement of negroes who once lived in the rice region of country.

The sawing of lumber—farming and distilling turpentine, are now the most profitable kinds of business near the seaboard and out of the city.

They are not considered favorable to the steady habits of the negro; but they yield very tempting incomes, varying from three to six hundred dollars to the hand.

Over the bar of Georgetown alone, a single port in South Carolina, the lumber and naval stores which passed out during the last fiscal year, it is computed, exceed half a million of dollars in value. The quantity exported is steadily increasing.

**COTTON.**—The crop most largely exported from the United States is Cotton. It pays for two-thirds nearly of the imports—the basis of Federal revenue.

This important staple, the peace-maker between Europe and America, is the chief product of the industry of the States furnishing the constituency of this Association.

Cotton,\* long known to the world, has been grown and worn in the East for centuries. The application of machinery to its manufacture, imparted a decided impulse to the culture of the raw material. But it remained for the invention of Whitney's† saw-gin to remove the

chief difficulty in the way of its production in America—a production now limited only by the wants of mankind.

Amazing as has been the progress of the growth of Cotton in America, the population, almost, and the commercial prosperity of the United States have kept pace with it.

I will not more than allude to the exports of the year 1792, in comparison with those of 1851—sixty years after. (In money value they are as \$52,000 to \$112,315,317!) Nor will I offer the reflections suggested by such a comparison. Some other mind will do this service more appropriately and ably. They are replete with instruction as well as interest.\* For the benefit of States as well as individuals, we are warned that "To whom much is given, of him shall much also be required."

The variety which is cultivated on the sea-coast introduced into Georgia first. Removed from the influence of salt atmosphere it degenerates, and the staple becomes inferior. The region in which it is produced extends from the River Santee, in South Carolina, including the Parish of St. John's Berkley, to the ever-glades of Florida; embracing a belt of land some twenty to thirty miles wide, measuring from the Atlantic.

The crop of 1852 may be set down at 34,000 bags:

The receipts in Charleston were,	19,843 bags,
"    in Savannah,†	12,971 "
besides several hundred bags, say	1,186 "
(which were sent directly from Florida to New York and New Orleans)	

34,000 bags.

Out of which quantity, it is estimated that 4,000 to 5,000 bags were furnished by the State of Florida.

Judging from the quantity of land recently cleared in Florida, and the comparative success which has hitherto repaid the enterprising cultivators of long staple Cotton in that State,† it

\*The comparative distribution of the general crops of Cotton, for ten years past, must not pass unnoticed. It appears (*N. Y. Journal of Commerce and Hunt's Merchants' Magazine*, Nov. 1853.) that from the years 1843-44 to 1852-3, while the Cotton crop has increased from 2,124,895 bales to 3,354,058 bales, the consumption of Great Britain has diminished in the ratio of 56.50 to 51.78—that of France as 13.30 to 12.72—that of the North of Europe has increased in the ratio as 3.25 to 5.19—that of other foreign ports as 3.54 to 5.77, and that of the United States as 1632 to 20,59 per centum.

†See Appendix A. for a Letter received after the foregoing statement was made up.

‡The planters in Florida have fresh lands not yet infested with bugs and insects. They use the plot ex-

\*Mr. William M. Lawton, of Charleston, has in his possession a sample of Cotton, (produce of a single pod) which was plucked from the tree in its wild state, growing in the Island of Cuba. The tree is said to bear about three years—the staple, of course is inferior.

†Whitney's invention was patented in 1793. There, is now on exhibition, at the World's Fair, in New York, a model of the original Saw-Gin. Class 5 and 6. No. 166. The model is owned and exhibited by his son, Eli Whitney, of New Haven, Connecticut, where the remains of the ingenious inventor lie buried. He died January 8th. 1825.



is estimated that the crop of Florida, if not the present year, will very soon equal that of Georgia in quantity.

**SEA ISLAND COTTON.**—In treating this subject, without presuming to enter on the field which has been so thoroughly traversed and completely occupied by the distinguished President of the State Agricultural Society, I will only venture to add such gleanings as I have been so fortunate to make in Georgia and elsewhere, together with some few results which have been obtained in Carolina, since the writing of that elaborate and able essay, to which I beg leave to refer.\*

The soil best adapted to the production of fine Cotton is a light yellow, sandy soil. It bears well the admixture of salt and marsh mud with the compost applied to it, and yields, if fairly dealt by, a fine, long and even staple.†

The better practice is to prepare the land by listing in the remaining growth, as soon as the last year's crop has been picked—even before the Cotton has been cleaned for market. The alleys are then broken up with the plow. In the spring, the earth, well manured, is drawn up with the hoe, making a bed upon the autumn listing, and the seed is sown in dibbles, a peck to the acre, or more, according with the strength of the soil, &c.‡ After the seeds germinate, the alleys are again broken up with the plow, and soon the process of thinning begins. With the three first hoeings, the plants are gradually thinned out to the stand of a single stalk, eighteen, twenty or twenty-four inches, or more, from its neighbor. The ground must

be kept clean throughout. The quantity or rate of planting, when the hoe is altogether used, does not exceed three acres to the hand; and the task is one fourth of an acre (105  $\times$  105 feet.\*) If the plow and scraper be used together with the hoe, much more may be accomplished, the hoe drawing up to the plants the earth loosened by the plow, the task may be three-fourths of an acre. Where the plow is used freely, seven acres to the hand may be tended, as in Florida, and perhaps on Santee. But, on this scale, the manuring must be neglected, or only partially done. In Georgia, my informant† who uses the plow and scraper, plants five acres to the hand, in order to keep his land in good heart by manuring. For the same reason a very successful planter on Edisto,‡ tends but five acres to the hand. He uses the plow freely, manures well, and makes a good interest.

The effects of the autumnal gales, so unavoidable, are sometimes disastrous to the ungathered and ripening crop.

Among the diseases to which Long Cotton is subject, blight, rust and "blue,"§ may arise from some defect in the soil, which, doubtless, may be removed, or partially remedied by proper dressing, at the proper season, together with thorough draining—for caterpillar and the bug there is no certain remedy but propitious seasons—unless, indeed, it be found in a judicious rotation of crops, and naked fallows, the ground being well broke up and exposed to winter frost. When about to be attacked, however, defend your plants by all the means within your reach. Destroy the enemy in embryo, as the energetic planter, last alluded to, has shown can be done.

**PREPARATION FOR MARKET.**—It requires from fifty to sixty days to prepare a bale of fine Cotton for market.

1st. The seed-cotton must be sorted for the gin, i. e., the dead leaves, and every thing, extraneous is picked out say sixty pounds to the hand.

2. It is then passed through the roller gin, which relieves it of the seed. The common foot gin or treadle, propelling two rollers, is the machine commonly used for separating the fibre

\*Among Cotton planters, on the seaboard, the acre is laid off square, two hundred and ten feet (210  $\times$  210) being made up of four squares of 102  $\times$  103 feet—44,100 square feet.

†Mr. Waldburg.

‡Mr. Townsend.

§Dr. Bachman suggests that these diseases may be due to some minute insects. The suggestion is worthy the attention of microscopists.

\*Memoir on Sea Island Cotton by the Hon. Whitmarsh B. Seabrook, President of the State Agricultural Society, and recently Governor of South Carolina.

I take leave here to acknowledge the favors which I have received, in the way of information, freely and kindly given, both as to Cotton and Rice, from Dr. Scriven, Messrs. Waldburg and Habersham, of Georgia; from Messrs. William Seabrook, William M. Lawton and John F. Blackblock, of South Carolina.

†The usual compost is prepared in summer by mixing with farm-yard, cowpen and stable litter, salt marsh, marsh mud, and even salt. It is applied to the land in winter at the rate of forty, fifty and seventy cart loads.

‡Mr. Townsend, of Edisto, does not depend on the "cart loads," but covers his land well with the manure.

§In order to ensure the production of fine Cotton, the seed must be carefully selected, and well attended to. Owen's Selection has, at present, a high reputation. Mr. Geo. C. Owens has given name to the seed, as Mr. Kinsey Burden did to his in 1826-30.



from the seed, cleaning on an average twenty-five pounds a day. The McCarthy, or Florida Gin, with one roller, is now attracting much attention; and the planters are putting them up as fast as they can procure them. A gin, costing one hundred dollars, propelled by a good horse or mule, or still better by steam will clean from 150 lbs. to 200 lbs. a day.

3. The Cotton is "moted" as it comes from the gin, namely: all particles of broken seed, and every speck which may have escaped detection in the "sorting," are carefully removed. Thirty pounds to the hand are moted after the foot gin, sixty pounds after the use of McCarthy's patent, or in such proportion.

4th. It is then packed by hand in the old fashioned round bales, containing each 320 lbs. to 400 lbs., of clean merchantable Cotton.

The finest Cotton is exceedingly delicate in vegetation, and requires careful handling throughout. It can only be produced, therefore, in small quantities; and then, unless everything be propitious, it does not pay too well. The cost of producing a bag of ordinary Sea Island Cotton is about \$75,\* that of the finest twice as much.

PRICES.—In 1851, in Charleston market, fine Cottons were sold at 60 cents per lb.—a single bag commanded 79 cents.

In 1852, fine Cottons sold at 80 cents, per lb., only a bale or two brought more, (85 cents.)

Ordinary Sea Island Cottons commanded in Charleston,

In March, 1851, 30 cents per lb.

" 1852, 30 cents per lb.

" 1853, 43 and 45 cents per lb.

The planters are few who make the finest Cottons, some, eight or ten, perhaps, in Carolina, planting a small portion of their lands in the choicest seed, which has to be selected with great care from year to year.

These Cottons are taken by England and France, chiefly through the ports of Liverpool and Havre. England receiving the larger proportion, re-exports a part of her supply to the Continent, (Switzerland and elsewhere,) where it is manufactured into exquisite laces and muslins. A few hundred bags of Sea Island Cotton are manufactured in the United States, chiefly in making spool cotton. A pound of Sea Island Cotton may be spun so fine as to produce a thread of incredible length. Yet Prof. Mitchell, of the Cincinnati Observatory, stated that no

thread, of any kind, which he could procure, was equal in fineness, lightness, and elasticity to that of the spider's web.

The Cottons that will command from 45 to 68 cents per lb., made with the proper use of the plow, and cleaned by the improved machinery, yield a very handsome interest upon the capital invested, say not less than from ten to twelve per cent. Fourteen per cent. was realized last year by more than one planter.

(TO BE CONTINUED.)

From the Southern Cultivator.

What Shall be done for Southern Agriculture?

\* \* \* \* \*

It is true that the best informed in the community admit that *something* should be done to change for the better the general character and results of Southern tillage; but they are by no means agreed as to what that *something* shall be. Propose what you will to increase your professional knowledge, and to communicate the information to the masses, and ten years' labor will barely suffice to command the popular suffrage for ever so good a measure. This tardiness, however, of popular appreciation, ought not to prevent the true friends of agriculture from proposing such plans for its improvement as shall appear to be wise and proper.

If nothing is proposed nor attempted, it is plain that nothing will be done, and the impoverishment of Southern soil must go on increasing from year to year as rapidly as our field laborers increase. That such is our present practice admits of no reasonable doubt. Not one acre in a thousand under the plow receives a fair return in manure for the crops it yields, take ten or twenty years together. Restitution for all the cotton grown and sent to distant markets, is a matter which the planting States have yet to take into consideration for the first time. Indeed, the very raw material of crops—the things out of which all agricultural plants are formed—have yet to be known to millions of farmers and planters. Until the cultivator sees the elements that really make the staples, which he sells and knows whence they are derived, he can hardly begin to husband his resources aright.

Reading farmers need not be told that *ammonia* and *potash* are the two most expensive constituents of grain and cotton. Nevertheless, additional experiments are needed to ascertain the best ways and means to accumulate these valuable alkalis on the farm for agricultural purposes. Deeply sensible of our lack of knowledge on this and many kindred subjects, the writer has long urged the necessity of having a few well-conducted experimental farms in this country to test by practice all the best suggestions of science. Now, science and practice rarely come near enough to speak to each other. They should be friends, and work cordially together in the same field. By the munificence of a patriotic and distinguished farmer, provision has been made for cultivating and teaching the

\*This has reference to Cottons produced by the hoe culture without the plow.



science of agriculture\* in the University of Georgia. Appliances to demonstrate in a satisfactory manner on broad acres the principles of the most advanced farm economy, are still wanting. No more verbal instructions, no chemical manipulations within the four walls of a laboratory, will satisfy plain, out-door farmers. They naturally, and we think rightfully, expect results in common agriculture to justify all that is stated in the lecture room. In a word, theory is valueless beyond what experience fully sustains in practice. To cultivate rural arts as well as rural sciences, successfully, requires not a little care, study and patient devotion to one purpose. Any one who will undertake to answer the question, why agriculture has made so little progress in five thousand years can hardly fail to see many impediments in the way of its improvement. Tillage for any length of time could never inform a man as to the nature of the substances taken out of the earth to make any plant which he might chance to cultivate. Hence, without the aid of analytical chemistry he could never have known what are the elements of simple water, of carbonic acid gas, of the atmosphere, nor of the soil, or its products. With the light of chemistry, geology, physiology, and other natural sciences, the practical man may now modify his farming in a thousand ways to his advantage. He is, however, often in doubt what changes to make.

These doubts can only be removed by wisely conducted experiments. Instead of requiring a million farmers to try, each for himself, any experiments that may be needed to settle a point in tillage or husbandry, it would be vastly more economical and satisfactory, to give a few reliable men all the necessary facilities for making the required experiments, which they could execute for the equal benefit of the whole agricultural community. The fact should never be overlooked that valuable experiments in agriculture are generally expensive; and hence, where funds are not provided for that purpose, and much pains taken to avoid error, experiments are either not reliable, or not instructive.

Substantial advancement in any calling implies the development of new truths, and of unquestioned additions to the aggregate stock of knowledge. If we can add nothing to our present mental capital in our profession, then our whole capacity for improvement is exhausted. Such an assumption would be as discreditable to our intellects, as prejudicial to our pecuniary interests. There is a way in which man's capacity for improvements may be indefinitely expanded in agricultural knowledge, as in that of other honorable and useful callings. The happy union of art and science, of mental culture with field culture, will alone attain this noble result. Rural sciences cannot advance without the assistance of rural arts. Believing these views to be sound, we are anxious to per-

suade the public to make provision for combining researches in the elements of agricultural practice and sciences at the same educational institution. Such researches may be expected, not only to elucidate all the more important facts now known in our profession but to extend our knowledge into unexplored regions, and bring to light new truths of great importance. Once on the right track, our progress will be that of railroad speed compared with the slow motion of the old-fashioned ox-cart.

We cannot but regard it as a misfortune that the masses are so slow to discover the propriety of studying the scientific principles of agriculture in connection with their practice. From the lack of popular sympathy no legislature in this country has founded an agricultural school,\* nor has the experiment of such an institution ever been fairly tried in this Republic. Public opinion is everywhere against the scheme, acting on the wrong principle of condemning a purely educational idea without a trial. Coming generations will not be so hostile to agricultural science, but foster it with the most anxious solicitude for its invaluable fruits.

Applying science to every pursuit in civilized communities, no art will be left to grope its way in the dark, as the art of agriculture now does; but all will enjoy the benefits of sound, well tested principles to guide their operations.

All useful arts will flourish when based on nature's laws, and cultivated for the improvement of society. Now, the leading end aimed at is not so much to serve and elevate mankind, as to gratify an idle love of riches for useless display and mischievous vanity. A taste for science has to be created before its union with agricultural and mechanical labor can be general. Slowly, but certainly such a taste is growing up in the popular understanding. Perhaps nothing better can be done at this time to promote the culture of this taste than to extend the circulation of this journal. It aims to diffuse as much science among agriculturists as will be acceptable to its readers. As a medium through which thousands in several States may constantly teach one another, it is rendering the public an invaluable service; while at the same time, it is working an auspicious change in public opinion in favor of agricultural literature, text-books, schools, experimental farms and plantations. Our agricultural societies are also worthy of generous support as a means of improvement. All the great achievements of the age in which we live have been wrought by wise co-operative efforts; and the principle of association is yet to confer infinitely greater benefits on the study and practice of rural economy. As an isolated farmer, the advantages of each are small indeed for high professional advancement, and intellectual culture. To enlarge and improve these too narrow advantages is the hope and the wish of our heart. It is the object to the attainment of which our humble life is devoted.

L.

\*Science of Agriculture!! Surely, Doctor Lee, you would not say that Agriculture is science! My dear sir, our boys in South Carolina will teach you better. Read the introductory address by — Loudon, of S. C. College, Columbia, Dec., 1854.—*En. F. & P.*

\*Nor will it be done until those who have the right take the power into their own hands, to dictate the measure to political aspirants.



### Reasons why every Farmer should Pursue his Business as a Science.

#### 1. *Because Agriculture is a science.*

Every man who has pursued, even moderately, the Science of Vegetable Physiology, understands perfectly that almost all the modern improvements in fruit culture have been made, because men have devoted themselves to the study of the great facts in regard to the growth of plants and trees; the circumstances in which they flourish most; the chemical analysis of the elements which compose them, and the modifications of which they are susceptible, by proper care and cultivation. Just so in respect of the various soils which the farmer has to manage. If he knows the chemical elements which compose them, and those which compose the various products he wishes to grow, he will be able to adapt his crops to his soil, and his manures to both, in a way which will prove to all that Agriculture has its laws; and that acting in conformity with them, is the basis of the only true art in farming. For example: wheat contains gluten and starch in such proportions that they compose together *seventy-five per centum* of its entire substance. Now, if the farmer undertakes to raise wheat on a soil which does not contain the elements of starch and gluten, he will fail. His soil will not give that which it does not possess. His lost labor and wasted capital will be the penalty of his ignorance of the scientific condition of permanent success. On the other hand, the knowledge of these conditions, and the application of them in the exercise of caution, common sense and reasonable skill, will bring an abundant reward.

Every department of the great business of farming is full of the illustrations of the point that we are now on; namely, that Agriculture is a Science, and that its laws, when known and applied, will secure results as certain as any that attend the application of the laws of Hydraulics in Machinery, or those of light and chemistry in the beautiful productions of the Daguerrean art.

2. *Because Agriculture pursued as a Science, with the needful caution and perseverance, is a source of the highest and most constant pleasure.*

No thinking, active mind is content with mere processes of muscular effort. To such a mind, the tread-mill of a farmer's work, pursued from generation to generation, in the same unvarying monotony, is tiresome enough. The toil becomes doubly toilsome, because it is enlivened by no living and inquiring thought. And the farmer himself becomes almost as stupid as the cattle he feeds, except politics, or lit-

erature, or religion, shed at intervals, and from afar, a beam of cheerful light on his mind. But let every process have its well digested theory; let every piece of work, while done in its time, and most efficiently performed, be an experiment which compares different modes of manuring or cultivation; let every change be made on sober thought, and with a full knowledge of the objects to be gained, and of the best and cheapest means of gaining them; in short, let the life of a true Science send its healthy pulsations through the whole system of a farmer's work, and he feels a joy "unfelt before," in every work to which he sets his hand. His farm becomes his laboratory. The pleasure felt by the Chemist or Artist, as he communicates these discoveries which bring the ends of the earth together, and revolutionize the social condition of nations, is shared by the careful and laborious students in Scientific Agriculture. For he is applying similar principles, and his labors tend to a similar result. Every crop is a study to him, for it has its own laws to be studied. Every season has its charm for him, for its changes and chances must be carefully watched. He must make suns, showers, and snows, and frost, and fire, all to minister to his interests and work out his ends. And in doing all this—and all this he will do, if he works with open eye and careful hand—will he not find a pleasure so constant as to enliven his heaviest toil, and so varied as to strip of their charms the false attractions of city life, and so purely intellectual and refined, as to place him in dignity and aim side by side with the great brotherhood of thinking men, whose hands have been busy, but whose brains have been more busy still; and who have done most for the wealth and comfort of the race, because they have done most for its improvement in all solid and enduring Science.

3. *Because it would be greatly to the pecuniary advantage of the farmer to pursue his vocation as a Science.*

If he pursues his work simply because he has done so before, or because his father or his neighbors have done so, he shuts out all improvement of course. If he makes changes blindly, he is much more likely to lose than to gain. Besides, if he makes experiments at random, some of his neighbors—and perhaps he himself—will set down his failures to the account of Scientific farming; and be the more confirmed in their old ways, because of his blindness and blundering in a single case. But if he studies, during his leisure, the results of former experiments in the department he is



enquiring about; if he converses with intelligent men, who have been successful in the same branch, and who understand and will explain to him the principles and processes which they have adopted he will be safe in following their example. And thus proceeding—with thought ever active, and making due account of all differences between his experiment and theirs, he will very probably be far more successful than in any other way. A little example of the disadvantages of ignorance, on a single point, will illustrate this matter. Within sight of the window by whose light the present article is written, is a strawberry bed. Its owner prepared the ground carefully, enriched it well, and planted it with plants of a choice kind, in the very best manner. He has hoed, and manured, and mulched, and watered now for two full years. The plants have grown, and spread, and flourished greatly. Every spring the ground has been white with flowers; but no fruit has been matured. And the owner has just discovered that the kind he planted was a pistillate kind. Of course it could never ripen its fruit. He has lost two year's fruit from his ignorance of this single fact. His neighbor, who lives but a little distance off, has had abundant supplies, from a bed but little larger, and no better cultivated, because he planted one row of Early Scarlets between every two or three rows of his pistillate kinds. This is a single case. Millions more might be gathered on a large scale as well as on a small one, all over our land. But we must stop now. We close with a simple remark: *The strictest Science is the mother of the truest Art.*—*Ohio Farmer.*

*To ascertain a Horse's Age.*—Every horse has six teeth above and below. Before three years old he sheds his middle ones—at three he sheds one more each side of the central teeth—at four he sheds the two corner and last of the fore teeth. Between four and five the horse cuts his under tusk, at which time his mouth will be complete. At six the grooves and hollows will begin to fill up a little—at seven the grooves will be nigh filled up, except the corner teeth, leaving little brown spots in their place. At eight the whole of the hollows and grooves are filled up. At nine there is very often seen a small bill to the outside corner teeth—the point of the tusk is worn off, and the part that was concave begins to fill up and become rounding—the squares of the central teeth begin to disappear, and the gums leave them small and narrow at the top.

*Cure for Heaves.*—Take some weed commonly called smart weed, that grows along the road side, or in the fields in low places; steep it in boiling water till the strength is all out, and give

the horse one quart of the liquid every day for ten days. Mix it with bran or shorts if he will eat it; if not pour it down him with a bottle. Give him green or cut feed wet up with water during the operation, and I will warrant a cure. Horses with heaves will be troubled with it as bad this dry and dusty weather, as they will in the spring of the year. This medicine is so simple, and easy to be obtained, that some may not think it worth their while to try it; but simple medicine many times prove more effectual than those obtained at a great expense. Now is the time to secure the weed, and I say to those interested, try it.—*HARVEY ROSECRANTZ.*—*Rural New Yorker.*

From the Soil of the South.

#### Small Hogs for the South.

MESSRS. EDITORS.—I see a communication in the *Cultivator*, from Jackson, Tennessee, in which the writer makes some enquiry with regard to the best breed of Hogs for the South, &c.; and as I like to have the opinion of my brother farmers upon all matters pertaining to our occupation, I will give your correspondent my views upon the hog and the breed that I think best adapted to this portion of the South (32 degrees 30 minutes). I am fully satisfied from over 20 years experience and close observation that a small hog is the best for the farmer, for several reasons:

1st. He is easier raised and fattened (that is, it takes less feed to do it;) he will fatten kindly at any age you may wish; while my experience with the larger breed is, they will not fatten well when young, say a year old. And I am fully satisfied that I can raise and fatten more pork from a given quantity of feed from the small than the large breeds.

2nd. The meat is sweeter and easier saved in our warm climate. What I would be understood to mean by a small hog is one with small bone, that will weigh, at from one to two years old, from 150 to 250 lbs. And such breeds can be found in nearly every county and parish in the Southern States. Whether they are natives or crosses from improved breeds I am not able to say; neither would I care if I was hunting a breed to raise from. While, Messrs. Editors, I am aware there is a vast difference between the different breeds of hogs, there is still a greater difference to be produced by treatment. And I have no doubt your correspondent might profit by your valuable hint, "that much depends upon the treatment."

I am much inclined to the opinion that each section of country has, to some extent, its pe-



culiar stock; that is, the climate and feed has its influence upon stock. For instance, the cattle in the lower counties of Georgia are not so large as they are in Western Texas, although they may have as much of the wire grass, peculiar to that section of the country, as they can consume; but it does not contain as much nutritious matter, and hence, stock raised upon it will not grow as large as that raised upon the rich prairies of Texas, and from that circumstance I infer that stock raised upon grain grown on poor land will not grow as large, however well fed, as if the grain was raised upon rich land. If I am correct in this opinion, we need not expect our stock to grow as large as it does on the rich lands of the Northwestern States. I would like to have your opinion upon this subject.

C. L.

Minden, La., 1854.

**VALUE OF AGRICULTURAL PAPERS.**—A subscriber in Connecticut, writing the *Albany Cultivator*, says,—“I am much indebted to the *Cultivator* for remedies which have saved me two cows, thereby saving enough to pay for it a life-time, besides the great amount of knowledge obtained from it on all other subjects.”

#### Eating Meat.

The Americans are the greatest eaters of animal food. The pork consumed in the United States is three times the quantity consumed by the same number in Europe, if statistical accounts are to be believed. Animal food is very generally set on the table three times a day in the western country. An Irishman writing home and extolling the luxury of his condition in the new world, added, by way of a clincher, that he commonly took meat twice a day; upon which his employer asked him why he did not state the whole truth. He replied, that if he had said three times, all his friends would have believed that he lied. This was going a little too far for common credulity. But after all, the Americans are a spare, hungry-looking people, not appearing as if well nourished. The inhabitants of northern Europe and Asia are physically and morally weak, though living mostly on fish and flesh. The Scotch and Irish, who eat but little meat, are strong, capable of great labor and fatigue, and more able-bodied men than the English, who are more addicted to animal food. The strongest men in the world, of whom we have any account, are the porters of Smyrna, who never taste flesh. The South Sea Islanders are very powerful men, upon a diet mostly of vegetables and fruit. It is said that the soldiers of Greece and Rome seldom tasted meat, though qualified by physical courage and

endurance for the conquest of the world. The suspicion is quite strong that Jonathan would gain flesh and improve his general appearance, by the substitution of bread and vegetables as a part of his diet for animal food.

#### Railroads and Agriculture.

Railroad Companies in the South may be compared to the boy with the goose that laid the golden egg—“they consider a bird in the hand worth two in the bush.”—Ed. F. & P.

For some reason, which we do not understand, the men who control the numerous railroads in Georgia do not encourage the transportation of lime for agricultural purposes, as wisdom would seem to dictate. The so-called improved lands of the State would give them twice the freight in cotton, grain and provisions, in groceries, hardware, salt and dry goods, and in travel, if these lands were properly limed. The soil supports the inhabitants of all the States, and they support the railroads. To improve the soil, therefore, is to enrich the owners of railroads as well as the owners of cultivated lands. And yet, railroad companies virtually prohibit the transportation of lime for agricultural purposes, over their roads! This shortsighted policy will not stand the test of criticism. It depreciates the value of railroad stock by keeping both the land and its cultivators too poor for high production.

If the hot summers of the South do not burn up clover plants; if they will increase the yield of cotton from 500 lbs. of lint in the seed\* to 500 lbs. of clean staple in the bag, per acre; and if “the lime lands of South Alabama have appreciated 100 per cent.” because they are proved to be adapted to the growth of red clover, then there is no good reason why lime should not be as freely used in South Carolina and Georgia as it is in Delaware and Maryland. We do not condemn the cultivation of peas as a renovating crop, nor as a forage plant, by pointing out some of the advantages of growing clover for grazing purposes. Every farmer needs a plenty of rich pasturage at times when his pea-fields are not available. Such clover pastures as Mr. Croom speaks of are almost invaluable in making meat, mules, cows, and other stock. All poor land must be enriched before clover will flourish therein, either South or North. On many soils, particularly the red clays, lime alone will suffice; on others gypsum will do the needful; while on some, bones are required to meet the wants of clover, as of turnips and wheat. By adding lime and guano to poor land, we hope to get a fair return in clover. Manure of all kinds operates best on land that has a plenty of lime in it. This is a fact of great importance in the long run of farming. Manure rarely, if ever, fails to secure large clover, where the seed is good and well put in; but manure is a scarce article on many plantations. Guano is the best substitute for stable manure known to the writer.

L.

[Southern Cultivator.]

\*500 lbs. of seed cotton?—Ed. F. &amp; P.



From the Southern Cultivator:

**Poultry Cholera**—“Kittlewell’s Renovator,” &c.

An esteemed friend, at Beaufort, S. C., writes us as follows:

The “Cholera,” has carried off all my ducks and many of my turkeys and fowls; but lately a friend trying the spirits of turpentine for “gapes,” I was induced to try it for “cholera” also, and with unexpected success. I have had it also tried upon my plantation, and it has proved decidedly the best remedy that I have tested as yet. The oxyde of iron has failed as a preventive, and the feather in the neck, and doses of pepper and whiskey as a cure, as far as I have tried them.

I tried this season “Kittlewell’s Renovator, or Agricultural Salt,” largely, upon long-stapled cotton, and the results were very promising, until the tide during the late gale overflowed all my cotton fields, and cut off two-thirds or three-fourths of my crop. This manure has, in this neighborhood proved much better as well as cheaper for cotton than Peruvian Guano, and the consumption of it, though already large, is likely to increase. It gives good growth of weed, with proportionate fruitfulness, while Guano fails in the latter respect. Guano I have tried upon corn and cow-peas, and with very satisfactory results. It was strewed, at the rate of one bag per acre, in the bottom of a furrow turned out of the bottom of the row with a two mule plow, and then two similar furrows thrown back over it, for corn. The peas had four furrows and a rough bed, as the land was very weedy.

Yours respectfully,

R. C.

REMARK.—We have tried many remedies for the “Poultry Cholera,” but as yet do not claim to have discovered a *specific*. Stimulants, like common table mustard, mixed with water, (dose, a teaspoonful) and “Radway’s Ready Relief” (half a teaspoonful) are very useful, and constantly repeated, will often cure, if administered in time.—EDS. SOUTHERN CULTIVATOR.

**What Does a Pound of Cotton Cost.**

The profits of cotton planting are in our estimation largely overestimated. At 8 cents a pound, which may perhaps be taken as the average price of cotton, it is a fair business—nothing more. There are individual instances of planters who make a large profit at that price, but for every such instance another can be found, who, on the other hand, barely makes a living at the same rate. The laws which gov-

ern money-making are the same in cotton planting as in every other legitimate business. Close economy, strict attention to his business, prudence and industry, will, in the end, make a rich man, whether he makes cotton bags or sells calico, whether he tills the earth or plows the ocean, and without these elements he can no more prosper in the one than in the other. There are more fortunes made at planting than at any other business, very probably; but this result is attributable not to the supposed fact that there is more money made at the business than at any other, but because planters are, as a class, more economical, and live more at home than any other. It is not to be denied, that our vocation has decided advantages over many other pursuits—its independence, its stability and its security for instance; but it will be found, the world over, that just in proportion as these advantages are sacrificed in any pursuit, no matter what, just in that proportion are the anticipated profits enhanced. The shipping business, for instance, has to encounter more risks, and is proportionally more uncertain than planting, but when its adventures are fortunate, they yield a much larger return, than the same amount would if invested in land and negroes. So of banking, so of mining, so of merchandizing, so of every other moneyed pursuit. After all, there will be found a surprising uniformity characterizing the profit and loss account of the various legitimate avocations of life. The advantages and disadvantages, estimated with reference to their profitableness, are very evenly balanced, and a choice between them is a matter to be regulated by tastes and talents.

We set out, however, with the assertion that the profits of cotton planting were largely overestimated, and we return to the question, what does it cost to produce a pound of cotton? There are difficulties in the way of an exact answer to this question, and our estimates will be necessarily approximative, but we think not far out of the way. We shall, of course, represent no one isolated instance, but will base our calculations upon the ordinary operations of the cotton plantation. We shall assume that the average value of a full hand is \$900, and that the unavailable negro property on the plantation, in the shape of young and old negroes, amounts to 33½ per cent. upon this; that is to say, on a plantation where the negro property amounts to \$12,000, the value of the available force will be only \$9,000. In calculating the interest, therefore, upon the value of each hand, we shall add to it 33½ per cent. for the value of



the inefficient negroes, because it is a necessary part of the cost of a cotton plantation conducted on the general plan. We shall allow thirty-five acres of land to each hand, twenty-five for cultivation, and ten in the woods. The allowance of land, we know, is below the fact generally, for there are few who own less, and a large number own twice or three times as much. We think, however, that the crop should not be charged with a larger proportion of wood land, inasmuch as it is in no way indispensable to its culture. We have taken ten acres of wood land to the hand as sufficient to afford wood, timber and privilege to the plantation. By the returns of the last census, the average cash value of farms.

In South Carolina was \$5 08 per acre

In Georgia.....4 19 " "

In Alabama.....5 30 " "

In Mississippi.....5 22 " "

In Louisiana.....13 71 " "

making an average in these five States of \$6 70 per acre. The average of cotton lands in Louisiana is not, probably, so high as the figures in the above table, but the average in the other States, we are satisfied, is a low estimate.

The usual rule on cotton plantations is to allow one mule for two hands, and the result of our observation is that the average duration of good service that may be expected of a mule, with ordinary plantation treatment, is five years. We shall, therefore, charge the crop with interest on the prime cost of the mule, and 20 per cent. for his wear and tear. In estimating the cost of clothing, hats, blankets, &c., we shall charge each hand with his own customary allowance, and 50 per cent. additional for the inefficient negroes on the plantation. The balance sheet will then stand thus for each hand:

Dr. To int. on 35 acres land at \$6 per acre,	\$16 40
" " on negro property.....	84 01
" " on $\frac{1}{2}$ cost of mule at \$150.....	5 35
" wear of same.....	45 00
" clothing, &c.....	8 00
" 50 per cent. on do. for unavailable negroes.....	4 99
" expense of overseer.....	15 90
" Salt.....	1 00
" Iron and blacksmith work.....	3 50
" bagging and rope.....	5 00
" annual expense for tools, wagons, gear, &c.....	3 00

\$160 16

Cr. By 2,000 lbs. ginned cotton.

According to the foregoing estimate, the cotton would cost a fraction over 8 cents per lb. It will be perceived that we make no charge

for corn and bacon, which, according to the foregoing calculation, is to be raised at home. Thus it is seen that, taking the average production of the country to be 2,000 pounds of ginned cotton, or four Georgia bales to the hand, and estimating that by a prudent economy the planter produces all his own supplies, it actually costs him eight cents for every pound of cotton he makes.—*Soil of the South.*

#### Nutrition in Various Grains.

Wheat is one of the most important of all crops. The grain contains from fifty to seventy per cent. of starch, from ten to twenty per cent. of gluten and from 3 to 5 per cent. of fatty matter. The proportion of gluten is said to be the largest in the grain of quite warm countries.

It is a singular fact that, in all the seed of wheat and other grains, the principal part of the oil lies near or in the skin, as also does a large portion of the gluten. The bran owes to this much of its nutritive and fattening qualities. Thus, in refining our flour to the utmost extent we diminish somewhat its value for food. The phosphates of the ash also lie, to a great degree in the skin. The best fine flour contains about seventy pounds of starch to each hundred. The residue of the hundred pounds consist of ten or twelve of gluten, six to eight pounds of sugar and gum, and ten to fourteen pounds of water and a little oil.

Rye flour more nearly resembles wheaten flour in its compost, than any other; it has, however, of certain gummy and sugary substance which make it tenacious and also imparts a sweetish taste.

In baking all grains and roots which have much starch in them, a certain change takes place in chemical composition. By baking flour becomes nutritious, and more easily digested, because more soluble.

Barley contains rather less starch than wheat, also less sugar and gum. There is little gluten, but a substance somewhat like it and containing about the same amount of nitrogen.

Oatmeal is little used as food in this country, but it is equal, if not superior, in its nutritious qualities, to flour from any of the other grains; superior, I have no doubt, to most of the fine wheaten flour of the northern latitudes. It contains from ten to eighteen per cent. of a body having about the same amount of nitrogen or of gluten. Besides this, there is a considerable quantity of sugar and gum; and from five to six per cent. of oil or fatty matter, which may be obtained in the form of a clear fragrant liquid.

Buckwheat is less nutritious than the other



grains which we have mentioned. Its flour has from six to ten per cent. of nitrogenous compounds, about fifty per cent. of starch, and from five to eight per cent. of sugar and gum. In speaking of buckwheat or of oats, we of course mean without the husks.

Rice was formerly supposed to contain little nitrogen, but recent examinations have shown that there is a considerable portion, some six or eight per cent. of a substance like gluten. The percentage of fatty matter and of sugar is quite small, but that of starch is much larger than any grain yet mentioned, being between eighty and ninety per cent. usually about eighty-two per cent.

Indian corn is the last of the grains we shall notice. This contains about sixty per cent of starch, nearly the same as in oats. The proportion of oil and gum is large—about ten per cent.; this explains the fattening properties of indian meal so well known to practical men. There is, besides, a good portion of sugar. The nitrogenous substances are also considerable in quantity—some twelve to sixteen per cent.

All these statements are from a prize essay of Mr. J. H. Salisbury, published by the New York state Agriculture society. They show the results of European chemists which have probably been obtained by the examination of varieties inferior to ours; they have not placed Indian corn much above the level of buckwheat or rice, whereas, from the above, it is to be seen that it is "in most respects superior to any other grain."

Sweet corn differs from all other varieties, containing only about eighteen per cent. of starch. Amount of sugar is of course very large: the nitrogenous substance amount to the very large proportion of twenty per cent.; of gum to thirteen or fourteen, and of oil, to about eleven. This, from the above results is one of the most nourishing crops grown. If it can be made to yield as much per acre, as the hardier crops, it is well worth a trial on a large scale.—*Prof. Newton.*

#### A Chloroformed Horse.

Messrs Cheeseman & Dodge have a valuable roadster who resolutely eschews all farriers, being determined to go as nature provideth and as we often see certain bipeds of another genus go from necessity—*shoeless*. The horse had long contracted this habit, while every means had been tried, from the nose twitch, to that of casting and binding with straps, &c., occupying the attention of some dozen men in a doubtful issue to set a shoe. This morning as I hap-

pened in at the stable, preparations were in progress for a determined *shoeing*. The fine fellow had been kept without his feed for twenty four hours hoping that fasting—that terrible mollifier of mettle—might aid the operation. I determined to interfere in behalf of the noble fellow. I suggested chloroform, and procured a half pound bottle. A groom led the horse from his stall into the open space, and while he held him by the halter with one hand, applied a saturated sponge holding about two ounces of chloroform to his nostrils with the other. After a few inhalings, he became quite passive; and in 10 minutes, or less, was perfectly ready to be shod, which was effected through all the various manipulations, with the same unconcern that any old nag would do, who having traveled a flinty road gloried in a new set of shoes well hammered on. He evinced no symptoms of sensation, nor flinched in the least during the clinching process. When one foot was finished, in taking up another, he seemed not to realize the necessity of aiding himself to gravitate. Yet his eyes seemed bright and natural. The experiment was deemed perfectly satisfactory and an increased value laid upon the horse. There was about a fourth of a pound of chloroform used, but a portion, perhaps one third of it was wasted in appliance. The operation over, the horse was led out and exercised for a few moments, when his feed was given to him, and apparently relished with great gusto.—*Xenia News.*

*How to Determine the Height a colt Will Attain When full Grown.*—Mr. Jas. R. Martin, of Lexington, Kentucky, gives out the following upon this point:

I can tell you how any man may know within half an inch, the height a colt will attain to when full grown. The rule may not hold good in every instance, but nine out of ten it will. When the colt gets to be three weeks old or as soon as it is perfectly straightened in its limbs, measure from the edge of the hair on the hoofs to the middle of the first joint, and for every inch, it will grow to the height of a hand of four inches when its growth is matured. Thus, if this distance be found sixteen inches it will make a horse sixteen hands high. By this means a man may know something of what sort of a horse, with proper care, he is to expect from his colt.—Three years ago I bought two very shabby looking colts for twenty dollars each, and sold them recently for three hundred dollars. So much for knowing how to guess properly at a colt.

Be admonished that a stitch in time saves nine, for the laying up one nail, or nailing up one board may save the ninth repetition and unruly stock.



From the Soil of the South.  
Soil for Red Clover.

MESSRS. EDITORS—In the editorial remarks appended to Col. Bond's letter, published in the September number of your valuable Journal, you courteously request that I should give my thoughts on the subject of the soils best adapted to the growth of Red Clover.

With sincere pleasure I now take up my pen to comply with your wishes and should have done so in time for the October number, but for my absence at Blount Springs during the past month.

And let me promise by saying, that I do not claim to be oracular on this or any other subject, and that my sole motives in this communication are to oblige you and to give some of the deductions of my limited experience, with the hope that it may result in good to the Agricultural interest.

It is emphatically true, that stiff soils are best adapted to Red Clover. There are, however, several varieties of stiff soils on which it is believed Clover will do well, if they are sufficiently fertile and deep, have lime and sulphur enough for the uses of the plant, and are besides based upon a stiff subsoil. These will be readily understood by the following description—First, there is the clayey loam, a soil in which clay preponderates, next, the loamy clay, in which loam exceeds, third the clay soil, fourth the loamy soil, and fifth calcareous soils. This enumeration embraces all the *stiff* soils and as before remarked, and be any of them based upon a stiff subsoil properly plowed, manured, limed and plastered will grow clover well. The successful experiment made at Pomaria, S. C., on an exhausted clay soil, by the late T. J. Summers, the details of which are given in my address, is both interesting and satisfactory.

Even in Great Britain, Professor Johnson says, that clover being a deep rooted plant, is found to grow best on stiff soils. Again he suggests that clover sickness caused by continuous clover crops on the soil, is nothing but the soil becoming too light to suit this plant, and again he says, when chemistry would fail to renew the clover crop, the adoption of mechanical means to stiffen the soil, such as eating off with sheep, laying down to grass, by which the effects of too frequent plowing are counteracted, may cause the land again to yield a profitable turn of this valuable crop.

The first class of land described by Col. Bond, lying on a clay subsoil, doubtless may be made to grow clover by the application of

lime and plaster of Paris, "if not already sufficiently calcareous. I would suggest to him the propriety of experimenting first, before undertaking the business on a large scale as thus: Sow 1 acre without lime plaster or manure, 1 acre well manured with fifty bushels of lime, another with one hundred bushels, one acre with guano without lime, another with guano and plaster, and one without manure, but with lime and plaster. He can vary the experiments in many ways, and so find out which is best. Of one truth I can assure him, that if he succeeds, he will be amply remunerated for all his trouble and expense.

As regards seed, my own experience authorises me to say, that they require no acclimation. I find the seed which come from Louisville, Ky., do as well the first year as those grown here. I have never saved seed to sell, but they can be readily obtained from Louisville, St. Louis, Lexington, Nashville, or from the seed stores in Mobile or New Orleans.

A gentleman living in the neighborhood of my plantation, Mr. Geo. Mince, made last year a bale of cotton of 500 lbs. to the acre, on a lot which had been in Clover several years, and which had been regularly mowed and grazed, while the adjoining land of similar quality without the benefit of the Clover yielded not more than 500 lbs. of seed cotton.

I have had the present year, about 275 fattening hogs, besides my other stock on Clover pasture. The grazing is fine at this time. I am sure that besides what was grazed, enough fell and dried up on the ground to make 80 tons of Clover hay. There is one field of 35 acres not grazed at all, where the ground is covered for one and a half to two inches deep with the dry stalk, and a fine second crop now out, and this field was sown in February last. The Clover and stock business does not at all interfere with a full crop of cotton, corn, potatoes and every other crop usually grown on the farm.

There cannot be a doubt that the now ascertained fact of our lime lands being adapted to the growth of Red Clover, appreciates their value 100 per cent. It is admitted to be true of the lands in Virginia, Tennessee and other States, and it is equally or more so, in South Alabama. Yours truly, I. CROOM.

P. S. As it may be interesting and useful to many of your readers, and especially those who are disposed to cultivate Red Clover, I send you Sprengel's analysis of the ash of this plant.

Potash, .....	26.70
Soda, .....	7.07
Lime, .....	37.90



Magnesia.....	4.45
Oxides of Iron.....	} 0.20
Alumina.....	
Phosphoric Acid.....	8.80
Sulphuric Acid.....	5.98
Chlorine.....	4.85
Silica.....	4.86

100

Per cent. of ash in dry state, 7.48

Greensboro', Ala., Oct., 1854.

#### Strawberries.

The strawberry crop is becoming an important one, both to the cultivator and consumer. It is a very delicious fruit, admirably combining rich acid and saccharine qualities, which render it very welcome in hot weather; and its being the earliest fruit in the season gives it an additional importance.

Every family in the country should have a good supply of strawberries, they are so delicious, and so much more palatable and wholesome than meat, butter, rich cake, etc. We would rather have for supper a piece of good bread, with fine-flavored strawberries, tempered with sugar, than the most costly and richest dishes that the wide world can afford.

So valuable is this fruit, that every farmer, and every one who has room in his garden, should raise it for his own family, at least, and unless he is in a region where the delicious wild strawberry abounds. And we trust that so much attention is now given to the cultivation of this fruit for the market, that every family can have a supply at a moderate price.

The farmer should consider that a bed of strawberries, two rods long and one wide, yielding a fair crop, will give him two quarts a day for twelve days, and twice that quantity if the yield be very large. A gardener informs us that from less than one square rod he had twenty quarts. But little land, manure, and time, are required to afford this most delicious and healthful luxury—to children a most delightful treat. Who will partake of the delicious feast, or lose the opportunity of illustrating the beneficence of our heavenly Parent in his bountiful gifts, and the kindness of friends in providing such fine delicacies to cheer their grateful hearts?—*New England Farmer.*

From the Edisto Clarion.

#### How to Kill Hawks.

Take a large teaspoon full of grated or rasped Nux Vomica, or as it is sometimes called, "Ox Vomit," and add it to one pint of grist and mix it thoroughly; after which, feed to the

small chickens, in the yard, and as sure as a hawk takes a chicken when the Nux Vomica is in the craw of the chicken, so sure will that hawk never come after a second chicken.

I am satisfied, Mr. Editor, that after one year's experiment, never to be without the Nux Vomica if I continue to raise chickens or turkeys, where the hawks are troublesome. So far from the Nux Vomica injuring the chicken or turkey it keeps them lively and thrifty. Of course you will discontinue the use of the Nux Vomica, when the chicken is large enough to keep out of the way of the hawk.

This discovery is not original with me, but so far as I know, was made by an old widow lady, who had more poultry in her yard at one time, than many others together, and not a gun was fired at a hawk, whilst her residence was near a swamp.

The above you may publish for the benefit of your subscribers.

POULTRY.

For the Farmer and Planter.

#### Rat Proof Corn Crib.

A friend has sent us the following directions for building a Rat Proof Corn Crib, a building that is much needed on every farm, especially where corn is so scarce and rats so plentiful. Try it.—Ed. F. & P.

"In framing let the sleepers into the side sills so that the top of the sleepers and sills will be level; joint your flooring, drive up tight, and nail down fast, and you have a floor that will neither loose your scattered corn, not let in the rats or mice.

Neither use stone or brick for *under pinning*, for the rats will certainly undermine them, and your sills settle; but use good blocks, two feet long, brought to a square at the top the size of your sill. Use these precautions, and I will guarantee you a complete riddance from the rat tribe, if you do not let them in at the door."

#### The Curculio.

In the *Country Gentleman*, we find amongst other remedies for the depredations of this destructive insect, the following.—Ed. F. & P.

"Another method, reported in the same paper, promises better, and is well worthy of trial. It is simply treating them with a breakfast, for a few mornings, consisting of burning sulphur and gunpowder, served from the throat of a gun. A small charge of powder is first put in the gun, on which a spoonful of sulphur is placed, without any wadding. One discharge into a tree, renders the whole top of a very uncomfortable place for any creature having a fine sense of smell, and the curculio is said to be one of this character.



### Value of the Field Pea as a Renovator of Exhausted Soil.

The following article has been sent us with a request that we give it an insertion in the *Farmer and Planter*, which we do with pleasure. We had marked it in the *Working Farmer* for insertion, before receiving it from our friend, with the remark that we were not before aware that any variety of the "field," or Cow-pea, as we call them, would ripen so far north as Pennsylvania.—Ed. F. & P.

The following is from the pen of J. S. Houghton, M. D., and was written for the *Pennsylvania Farm Journal*.

Our readers will remember our advocacy of this green crop for renovating the soil, when organic matter in cheaper form cannot be procured, and it gives us pleasure to endorse the views of the writer.—[Ed. *Working Farmer*.

"There is no theme of greater importance or more immediate interest to the farmer than the art of renovating exhausted soil or of bringing sandy or comparatively barren tracts into a state of fertility and profitable cultivation. The art forms, in fact, the basis of all good husbandry, and if it can be done economically and speedily, all other parts of the farmers work may be carried on successfully.

Having worked some sandy land in New Jersey, which had been very much exhausted by previous bad farming, I have been led to examine this subject very carefully. The result has been to show me, practically, several methods of accomplishing the object, each in my opinion better, and less expensive than direct manuring with stable manure which has to be purchased. They are as follows:

1. Growing potatoes and other crops, with large compost of simple peat, prepared for use with lime and salt, in the proportions of three bushels of lime to one of salt, and eighteen or twenty bushels of this mixture to the quantity of peat used to the acre—the lime to be slaked with the brine made from the salt.

2. Using guano and bone dust, (the latter dissolved with sulphuric acid) say 300 lbs. of guano per acre, on any crop you choose, (carrots being, where the ground is suitable, the most profitable for the manure).

3. The growing of clover by the aid of guano and plaster, with little or no use of composts, and turning under the clover as a green crop.

4. The growing of the field pea, feeding the same to stock, and making manure for more valued crops.

The merit of the first three methods I will not now consider. The fourth method I esteem the best.

The field pea I find, is but little known at the north, though it has been cultivated to some extent in New Jersey. The chief reason why it has not been more valued, I think, is because it is not, in itself, a very saleable product, as grain, and it has not been tried like clover as a renovator of the soil. At the South, in Virginia, South Carolina, and Georgia, the field pea is now much grown, both to be turned under like clover, and as food for stock.

The field pea is a clover plant, and like clover

may be made to flourish on a very barren and sandy soil, with the lightest possible manuring at all except the use of lime, or plaster of paris, or a little vegetable matter.

The vine grows about eighteen inches to two feet high, very rank, and spreads over a large space like the sweet potato or melon vine, and yields a great abundance of large pods, each containing a dozen or more peas, much like the small white bean in shape and size, though of different colors.

The merit of the crop consists in this—that it costs but little for seed; grows luxuriantly on the poorest soil; requires but little manure; and yields a large amount of valuable fodder and grain; while if turned under green it is equal if not superior to clover. It may be grown at once, where clover cannot be started, and requires but little cultivation. The vine green or dry, is eagerly eaten by cows or horses especially if served as "cut feed," and sprinkled with meal; and the grain, if boiled or ground, and fed as meal, will be freely eaten by horses, cows, hogs, and chickens, and is unsurpassed in its nutritive qualities even by wheat itself. Pea meal is especially useful for working cattle, as it abounds in the flesh-forming or nutritious principle, (nitrogen) to a greater extent than any other grain, and is also adapted for hens while laying, as it is rich in albumen, which is the chief constituent of eggs, and also in sulphur, so necessary to produce the "hen fruit" in perfection.

I am not myself, so much in favor of plowing under green crops, as many other persons are. I confess to the weakness of feeling which prevents many persons from sacrificing a well grown crop to the improvement of the soil by plowing it under. I prefer the plan of feeding all crops to stock and saving the manure which they produce. If the manure be carefully and properly saved, but little is lost by feeding to stock, while much is gained in working power, flesh, milk, eggs, &c.

Now take the field pea. You can grow it on sandy and barren soil, where you cannot make a good stand of clover without great expenditure of time and money. I grew the southern seed, this last season, on the most barren spot on my farm, (a mere sand heap, where no respectable weed ever flourished,) by planting in the roughest way possible, with no other manure than a little charcoal. I did not even plow the field, and it had not been plowed for many years. There was no sod on the field; it was a mere flowing sandy knoll. I just opened the furrows, say four inches deep, and sprinkled in them a light dash of charcoal dust, dropped the seed, having first soaked them in water. It was quite late when I planted them, (after all my corn was in) and fearing they would not mature (as the seed was from Georgia) I sowed them very thick in the drill, in the hope of having a large yield of vines for fodder. The peas sprouted quickly and came up in a few days, and notwithstanding the extreme drought, and the burning sun-shine of last season, the vines grew rank and strong, and remained of a rich deep green the whole season, not a leaf turning yellow or curling up, till September, when the



Pods all ripened well, and gave a fine yield of peas. The exact yield per acre I am unable to state as no attempt was made to ascertain it.

On another field, much higher and drier than the first, I tried a Jersey field pea, planting them in drills, deeply plowed and sub-soiled, and with rich and appropriate compost of guano, bone-dust, peat, lime, potash, &c., &c. This experiment was also highly successful; but I cannot say which was most satisfactory; for I cut up the last named piece while partially green and fed it to cows and horses, vine, peas and all, as green fodder.

The cows eat the vines and peas, eagerly, and the milk very perceptively improved in quantity and quality by their use, but exactly in what proportion I did not attempt to ascertain. After the cows had eaten the vines in the yard and had trodden some of them under their feet in the manure and dirt, a horse well fed on Timothy and corn meal was turned loose in the yard, and eagerly devoured the dirty vine left by the cows.

The vines and peas were also fed, to pigs, which picked off and eat the peas, but did not eat much of the vine, though they would probably have done so if they had not been fed on corn-fodder and other more juicy food.

The peas were also soaked and fed to chickens and hens, which, while having access to much other grain, still eat moderately of them.

Now this is my idea of the best method of using the field pea to obtain profit and manure.

Plant the pea as early as you do corn, in drills about two and a half feet apart, sowing about as thickly as you would for table peas, or rather less so. Plow your drills as deep as you can, if the nature of the soil permit such practice, and then sub-soil eight inches more. My reason for sub-soiling is, that the pea, like the clover, is a deeply rooted plant, and will be much aided, in times of drought, by sub-soiling. Manure with dry muck, if you have nothing better, or with guano and plaster of paris, composted with any vegetable matter, or loam if you feel disposed; and cultivate as you would for any other peas, beans, carrots, &c.

The pea vine will cover the whole field, if the drills be not too far apart, with rich green vines and leaves, protecting the soil from the rays of the sun, and collecting vast quantities of food from the atmosphere. As soon as the peas begin to ripen, pick the pods by hand, if you wish for seed, or the most perfect grain for meal; and as soon as the larger portion of the peas are gathered, and before the vines begin to lose their leaves, cut them with a scythe close to the ground, and cure as you would clover. If cut early, the vines will make a second growth fit for pasture.

If you have not time or help to pick the peas, and are willing to sacrifice the fodder to the seed, you can let the peas ripen more fully, and then cut the vines, when dry, and thresh out the peas as you would any others. Or, if fodder alone be your object, you may cut the peas before fully ripe, and cure vines and peas together, and feed them together, whole or as cut feed, in the winter.

It was the opinion of the men who cut my vines while in a half green state, that the yield of fodder was greater than that of a good clover field, and that it was of superior value as food, to say nothing about the peas, but the produce of grain, it was evident, was equal to that of corn.

The field pea sold in Savannah, Georgia, and Philadelphia, last March, at \$1 12 and \$1 25 per bushel. As a part of the food of cows, horses, hogs, or hens, I consider it even more valuable than corn although it has very little fattening power.

To give it satisfactorily, the farmer should have enough to cut a portion as green food, if he desired it; another portion should be cut and cured while still partly green for winter fodder, (peas and vines) and another patch should be kept for seed, cut when ripe and thrashed out. Or, if convenient, the seed, and peas for meal could be hand-picked as they ripened, and the whole field could then be used for fodder.

Now how is this pea to be a renovator of the soil? Why thus: it will grow on barren land, with little or no manure, where scarcely anything else will, and furnish two tons or more per acre for green crop for turning under or for food, and a yield of grain equal to corn or wheat in feeding value. This will support stock, and make manure, where none otherwise could be made, easily, and profitably. What other crop will do this? Some may say corn fodder. But the field pea will grow where corn fodder will not, and the latter yields no grain. Others may point to the bean. But that makes little, if any, hay. Others may speak of the root crops, the beet, carrot, and parsnip. True, these will grow on sandy and barren soils, but, in my experience, they are found to require more manure per acre than even wheat, to produce a crop worth keeping clear of weeds. There is no plant, that I know of, that can be so easily and cheaply grown on sandy and worn out soils, and which affords so large a yield of food for stock, or material for manure as the field pea. There is a Jersey pea which is called the "Crowder" by some people; but I do not think it equal to the best southern seed, at least for fodder. Either of these will answer a good purpose. I think pea vines and corn fodder, served as cut food for milk cows, in winter, with a little corn and pea meal, would furnish an admirable and highly economical food; and if, to these articles, carrots and parsnips should be added freely, it would leave nothing to be desired by the milk-man, or the maker of butter or cheese. The only thing I can think of which it might be desirably to purchase occasionally, where butter was the object, would be oil-cake, if it could be obtained cheap. And if any man, who can keep all the cattle and chickens he desires to, cannot produce good manure enough to renovate his worn out lands, then he ought to quit farming at once, and emigrate to Australia, or some other place where gold grows as a natural production of the earth, and don't even require digging.

Philadelphia, December, 1854.

Quality not quantity should be the maxim.





JERSEY CATTLE, IMPORTED BY DR. W. T. G. MORTON, ETHERTON FARM, WEST NEEDHAM, NORFOLK COUNTY, MASS., AUG. 1, 1854.



**Imported Jersey, or Alderney Stock.**

The following account of Dr. Morton's Alderney Stock, a group of which are represented on the opposite page, we extract from the American Farmer. We not, doubt this breed is much better adapted to our scant Southern pastures than the larger breeds, such as Durhams, &c.—Ed. F. & P.

We have been favored by Dr. Morton, of Mass., with a drawing, on another page, of a group of his Imported Jersey or Alderney stock. This stock was selected by the same gentleman who purchased for Mr. J. H. McHenry, Esq., those exhibited and so much admired at our last cattle show, and arrived in the same ship with them. Dr. Morton exhibited his stock at the late show of Norfolk Co., Mas., and was awarded a prize therefor, as follows: To Dr. Morton, of Needham, a gratuity of \$5 on two heifers and three calves, they being the best specimens of Alderney stock present, but not coming under the Society's rules, could not compete for premiums. [Not being long enough in the country.]

From the report of the Committee on the Dairy, of the same Society, we make the following extract:

"The Committee take pleasure in noticing a very extraordinary produce of butter, in a 40 pound lot, from three Alderney heifers recently imported from Jersey, England, offered by Dr. Morton, of West Needham, and they recommend that he receive a diploma from the society. The ages of the heifers, as Dr. Morton states, are—one 20 months, one 2 years, and one 3 years. They were received direct from England ten days ago, and the 40 lbs. of butter were made from them within the last nine days."

We had a visit recently from Dr. Morton, who informed us that he would dispose of a portion of his stock, at the prices annexed, deliverable on the cars at Boston, viz:

A 4 year old imported Heifer in calf, for \$300—a 2 and 3 year old do. do. in calf, \$250 each—and a 1 year old in April, \$125. These prices are less than they can be imported for now.

The following description of this breed of cattle is by Col. LeCouteur, of Belle Vue, in the Island of Jersey:—

The breed of cattle familiarly known throughout Great Britain as the Alderney, and correctly termed in the article Cattle, of the "Library of Useful Knowledge" "the crumpled horn," was originally Norman, it is conceived, as cows very similar to them in form and color are to be seen in various parts of Normandy and Brittany also; but the difference in their milking and creaming qualities is really astonishing, the Jersey cow producing nearly double the quantity of butter.

The race is misnamed "Alderney as far as Jersey is in question; for about seventy years since Mr. Dumaresq, of St. Peter's, afterwards the chief magistrate, sent some of the best Jersey cows to his father-in-law, the then proprietor of Alderney; so that the Jersey was already at that period an improved, and superior to the Alderney race. It has since been vastly amended in form, and generally so in various qualities, though the best of those recorded at

that period give as much milk and butter as they do now.

The Jersey cow is a singularly docile and gentle animal; the male, on the contrary, is apt to become fierce after two years of age. In those bred on the heights of St. Ouen, St. Brelade, and St. Mary, there is a hardness and sound constitution that enables them to meet even a Scotch winter without injury; those bred on the low grounds and rich pastures are of larger carcass, but are more delicate in constitution.

Of the ancient race, it was stated perhaps with truth, that it had no tendency to fatten; indeed some cows of the old breed were so ungainly, high-boned, and ragged in form, Meg Merillies of cows that no attempt to fatten them might succeed—the great quantities of milk and cream which they produced probably absorbing all their fattening properties.

Yet careful attention to crossing has remedied this defect. By having studied the habits of a good cow with a little more tendency to fatten than others, and crossing her with a fleshy, well conditioned bull of a race that was also known to produce quality and quantity of butter—the next generation has proved of a rounder form, with a tendency to make fat, without having lost the buttery nature.

Jersey butter, made when the cows are partially fed on parsnips, or white carrots and grass, in September and October, when salted and potted, will keep till the following spring, preserving as well as Irish butter, with a much less rank flavor.

The present price of the best Jersey cows, including points and quality is from 20*l.* to 30*l.*; and up to 20*l.* is given for the best heifers. Yearling bulls, of the best breed and points, from 10*l.* to 15*l.*

**MURRAIN AND BLACKLEG.**—These diseases are the common pest among cattle at the west, particularly in malarious districts. Mr. J. D. Hall, of Champaign county, informs us that he cured it so far without fail by the use of spirits of turpentine. After bleeding the animal by cutting off the end of the tail, he gives for a dose to a grown steer one pint of the article; and to a yearling one-half a pint. He has treated desperate cases with success in this way. An application of cold water is also made to the loins as a part of treatment.

A neighbor of his has been successful in the same diseases with an article called "Perry Davis' Pain Killer," which may very likely be composed of spirits of turpentine chiefly—though we do not know of the fact. Of this article he gives a fifty cent bottle at a dose.

The spirits of turpentine is probably the cheaper medicine and it has the advantage of being known as to its composition. Very likely a much smaller dose would answer every purpose—*Prairie Farmer.*

Give your calves, which you intend to raise, a little fine hay; and as soon as possible turn out to grass.

Feed your fowls the year round if you would make them profitable.



For the Farmer and Planter.

### Red Clover as a Fertilizer.

MR. EDITOR:—Feeling a necessity for some vegetable product to be plowed under as a green manure, or reclamer of our exhausted soils, as we are certain that we cannot improve to any extent by putrescent manures, we have been trying an experiment with Red Clover, as the article most likely to succeed. The *Rescue*, to the contrary notwithstanding, (and by the way, let me say, a greater *humbug* was never invented. We were in for one peck, minus 4, have sowed it and carefully noted progress, of which you will be informed by and by. (a) We sowed some time in March last, about an acre of land, known in agricultural language as galled land, mostly clay, which was lightly cow-penned—by no means rich. The land was well broken up with bull tongue plows, and oats sown at the rates of  $\frac{1}{2}$  bushel to the acre, plowed in with the same kind of plows. The clover was then sown, and a light brush dragged over the land to cover the same. The clover came up well, and when forming its third leaf, I gave a top dressing with plaster, at the rates of  $1\frac{1}{2}$  bushels per acre. The summer was very hot and dry, but my clover did well, and at the present writing, February the 14th., is up and looks well. We this day sowed two acres more, the preparation as before, with this difference: we used Kittlewell's plaster, (is it a compound?) (b) sown and plowed in with the oats, at the rates of  $1\frac{1}{2}$  bushel to the acre. We intend when the clover gets up and is forming its third leaf, to give a top dressing of the same at the same rates. Any information on the subject of clover culture, will be thankfully received.

SPARROWGRASS.

Little Branch, February 14, 1855.

REMARKS.—(a) We have also drilled one peck of the "*Rescue*" seed, and although at this time, (March 1st.) it does not present a very flattering prospect, we cannot yet give it up, and must believe our friend has pronounced judgment on it prematurely.

(b) We do not know, but we *do know* that a lot of Mr. K's, "fertilizing salts," purchased by us some time since, was like Falstaff's buck basket, a most "villainous compound," consisting in part of old burnt nails, coal, ashes, &c., &c. These extraneous substances might have been purely accidental, but they constituted rather too great a proportion to justify such belief without the exercise of much charity.

(c) You have made a very fair beginning, friend "*Sparrowgrass*," to test the value of clover as a fertilizer, but don't let it tempt you as did the cow pea a neighbor of ours, who planted them to improve his land, and before they were near matured, turned his cows

on, and in a few days made a clean sweep of them; leaving the land entirely bare and exposed to the sun. That field has never yet been improved. We often pass it, and never without thinking of our friend's folly. It gives us much pleasure to hear of such efforts as you are making to improve your land. The only objections to the use of clover as an ameliorator of much exhausted soils, is, that it will not grow until other fertilizers have been applied; and such is probably the case with the "*Rescue*" Grass. This objection will not hold against the pea, and hence many prefer it to clover. There is no doubt, however, that by cow-penning even our poorest lands, and following with clover, a certain and rapid improvement may be effected. Although we have heard it oftentimes asserted that clover cannot be profitably grown in the South, we have never believed a word of it. Our own experience has long since taught us better. Especially on the calcareous or neutral soils of the States west of us, may clover be grown most profitably, as it may also in our primitive soils with but a light application of lime or ashes, with the addition of putrescent manures in the preparation, if the land is very poor, or in a great degree destitute of organic matter. From one to two bushels of Plaster of Paris, to the acre, broadcast on the young plant will much increase the crop.

We shall look with interest to the result of your experiment, which we hope you will report for our columns. As also on the subject suggested in your private note.—ED. F. & P.

### Farms Improved by Keeping Sheep.

To some extent, keeping sheep is found to improve a farm, as they consume much feed that is left by other stock and lost, and at the same time enrich the ground, and give it a better and smoother appearance. This is shown by instances quoted in the Transactions of the Norfolk Agricultural Society, which we relate in brief:

A man having a small farm, formerly kept forty sheep, four cows and one horse, and had food enough for them the year round. The price of wool-falling, he sold his sheep, and for a number of years has kept other stock altogether. He now keeps but three cows and one horse the year round, and pastures two cows extra through the summer, sell very little hay—not half enough to keep another cow; he has the same amount of pasture and mowing as when he kept the forty sheep in addition to his other stock, and yet his farm does not look near as well as then. He used to raise turnips among the corn for his sheep to eat in winter, and gave them besides, a few bushels of grain. The lambs, however, more than paid for his extra feed.

Another farmer for a great number of years kept about sixty sheep, eight or nine cows, (or



other stock equal,) one pair of oxen and one horse. After keeping the sheep, for a number of years, he found he could then keep as large a stock on his farm with the sixty sheep, as he could keep without them before; showing that they had improved the farm to furnish their own support. To stock a farm entirely with sheep would not be so profitable as to keep a limited number—yet it would pay as well as other stock. The object is to keep enough to consume that part of the vegetation peculiarly fitted to sheep and which other stock will not eat, adding at the same time enriching elements to the pastures and yards by their manure. It is the opinion of many farmers, that pastures for other stock may be improved by keeping a small flock of sheep, upon them a portion of the time, and the opinion seems fairly supported both by reason and experiment.—*Selected.*

#### Fattening Animals.

There are certain principles which apply to the feeding of all animals which we will shortly notice:

1. The *breed* is of great importance. A well bred animal not only affords less waste, but has the meat in the right places, the fibre is tender and juicy, and the fat is put on just where it is wanted. Compare the hind leg of a full blooded Durham ox, and a common one. The bone at the base of the tail extends much further in the former affording more room for flesh, and the thigh swells out of convex or circular shape; while in the common ox it falls in, dishing and hollow. Now the "round" is the most valuable cut, and is only found in perfection in high-bred stock. The same is the case over the whole body. So well do eastern butchers understand this, that their prices are regulated by the breed, even where two animals are equally fat. They know that in a Durham or Hereford ox, not only will there be less offal in proportion to weight, but the greatest quantity of meat will be where it brings the highest price when retailed, and will be of a richer flavor and more tender fibre. The same is the case with hogs. A large hog may chance to make more meat on a given quantity of food than a small one, but the meat of the first will be coarse and tasteless compared with the other; and in the east, flavor and tenderness greatly regulate prices. Consequently, moderate sized, short-legged, small headed hogs, always, in the long run, beat large breeds out of flavor. In preparing for market, "fashion and taste" must be as much considered by the farmer as by the tailor. This one fact is at present revolutioni-

zing the English breed of sheep. The aristocracy always paid high for small Welch and Scotch mutton; but the great consumers, the mechanics preferred large fat joints. The taste is now changed. In Manchester and other such cities, these large joints have become unsaleable; and all the efforts of the breeder are now turned towards small breeds maturing early, with comparative little fat. According to late writers, the large Leicester and Cotswolds are going quite out of fashion. When we give \$3,000 for a Durham bull it is not that his progeny are "intrinsically" more valuable to that amount, but the increased value and the fashion together make up the difference. And it is thus, that while Durhams and Herefords are preferred for ships and packing, Devons are high in repute for private families. The joints are smaller, but the meat has a peculiar richness, probably found in no other kind of stock; and the proportionate waste is said to be less than in any other breed. Thus in the London market, the Scotch Kyloes, and then the Devons, (the former even smaller than the latter,) bring the highest price, because preferred by the aristocracy. So in Dublin, spayed heifers are sought for. But the breed also regulates the profit. There is nothing more certain than that one kind of animal will fatten to a given point on much less food than another, and as fattening our stock is only another mode of selling our grain and grass, those animals are to be preferred which come to maturity soonest, and fatten on the least food. The difference in hogs is very great and important. While some breeds must be fed for two or even three winters, others are full grown and fattened at ten months old; and the difference in profit is enormous. We cannot go into particulars, but the following rules may be considered as applying to all: An animal may be expected to fatten easily when it has fine bone, and fine soft elastic skin, with thin or silky hair; the head and legs short, the "barrel" large, but chest and lungs small; and when it is quiet, sleepy, and easy in temper. An unquiet, restless, quick-tempered animal is generally a bad feeder, and unprofitable.

2. Much depends in fattening on outward and mechanical management. Fat is *carbon*, or the coal which supplies the body with heat. If we are exposed to cold, it is burnt up in our lungs as fast as it is deposited by the blood; but if we are kept warm, by shelter or clothing, it is deposited throughout the body, as a supply on hand when needed. Warm stables and pens are a great as-



sistance in fattening, and should never be neglected. So, also, quiet and peacefulness are important. Every excited action consumes part of the body which has to be supplied by the food, detracts from the fat. In the climate of Michigan, warm stable, regular feeding at fixed hours, and kind treatment, with perfect cleanliness, save many a bushel of grain. Animals fed at irregular times are always uneasy and fretting.

3. Ground and cooked food fatten much more profitably than raw food. Mr. Ellsworth found that hogs made as much flesh on one pound of corn ground and boiled to mush, as two pounds raw unground; though the first did not fatten quite as rapidly, as they could not consume as much food in the 24 hours. By grinding and soaking, ten hogs will each gain 100 pounds in weight, on the same food that five would do if it were raw.

4. A change of food helps in fattening. Thus an ox fed entirely on corn and hay will not fatten as fast, or as well, and one which has roots, pumpkins, ground oats or buckwheat, &c., fed to it at regular periods. The latter may contain intrinsically less nourishing matter than the corn, but the change produces some unknown effect on the stomach and system, that adds to the capability of depositing fat. The best feeders change the food very frequently, and find that they make a decided profit by so doing. Salt should be given with every meal to cattle—say an ounce a day. It preserves the appetite and prevents torpor of the liver, to which all fattening animals are subject. This torpor, or disease, is, to a certain extent, conducive to fat; but carried too far the animal sinks under it.

5. In cattle the skin should be particularly attended to. A fat animal is in an unnatural state, and consequently easily subject to disease. Taking no exercise, it has not its usual power of throwing off poisons out of the system; and if the skin is foul, the whole labor is thrown on the kidneys. It is found by experience that oxen, regularly curried and cleaned daily, fatten better and faster than when left to themselves; and if the legs are pasted with dung, as is too often the case, it seriously injures the animal.

6. Too much rich food is injurious. The stomach can only assimilate a certain quantity at once. Thus an ox will prosper better on 30 lbs. of corn, and 30 lbs. of cob ground together daily, than on 40 lbs. of ground corn. These mixtures are also valuable and saving of cost for hogs when first put in the pen. If an animal

loses its appetite, the food should at once be changed, and if possible roots, pumpkins, or steamed hay may be given.

7. Oxen will fatten better if the hay or stalks are cut for them, but care must be taken not to cut too short. An inch in length is about the right size for oxen, half or three-quarters of an inch for horses.—*Farmer's Com. and Horticultural Gazette.*



## The Farmer and Planter.

PENDLETON, S. C.

Vol. VI., No. 3, : : : : March, 1855.

### Agricultural Convention.

The short time that has intervened between the issuing of our February and March numbers, is the cause, we presume, of not hearing from any of our friends on the subject of the proposed Agricultural Convention. We hope to hear from many of them in time for our April number. In the mean time we would suggest to our subscribers throughout the State, to get up meetings, say in May, for the purpose of appointing delegates to the Convention at some future time, to be stated after further consultation, in our June number.

Where there are Agricultural Societies existing in any of the Districts, let the President call a meeting of his Society; and where there are no societies, or club, we hope some active friends of the cause, will exert themselves to get up meetings for the above specified purpose. After the appointment of delegates, please report to us that we may give the names, &c., in our June number.

We do hope and trust that the farmers and planters of South Carolina, in this, to them most important move, will not evince that lukewarmness and apathy which, we regret to say, is but too characteristic in all matters appertaining to the advancement of their especial interests.

### Iron Plow Stocks.

We desire to call the attention of our readers to Mr. JAMES HUNTER's advertisement of the Iron Plow Stock, with various plows attached, which will be found on our advertising sheet. This is the plow for everybody. No end to its durability, unsurpassed in performance, and withal cheap, costing not more than double what a wooden stock with false coulter or red,



and clevis. (neither of which are necessary in this,) will cost, and last a common life time, instead of giving out every two or three years, as is the case with the former. We will, in our next, set forth some of the superior qualities of the Iron Stock over all others, as given by the manufacturer.

#### Inman's Patent Door and Gate Spring.

We have been presented with a couple of these superior Springs, one for a door and another for a gate; and from a very short trial of them, feel free in saying they are, in our estimation, *superior* to anything of the kind that we have ever seen. The construction is so simple that every one on seeing them, will wonder that they had not themselves "struck" on the principle long before. The right has been purchased by Messrs. B. F. & T. S. CRAYTON, of Anderson C. H., where they may be had, and also at J. B. E. SLOANS & Co., Pendleton, at the low price of one dollar.

#### The Farmer and Planter.

All former subscribers to whom our paper has been sent for January and February, are considered subscribers for the whole volume, and charged accordingly. They having failed or neglected to notify us of their intention to withdraw before the commencement of the volume, which they were notified to do in our last volume.

We are occasionally receiving numbers returned, and not unfrequently by the Post Master, without stating from what office; in such cases we continue sending the paper, not knowing where to find the name (unless of our personal acquaintance,) so as to strike off.

#### Black List.

We have an idea of publishing hereafter, a black list of names of such of our subscribers as move off in our debt and give no orders to transfer to their new location. We are frequently treated in this, we had almost said, dishonest manner, but whether it is so or not, we leave to others to judge. We consider it, however, *not quite* coming up to the golden rule.

#### Our Agents.

A list of our Agents will be found on first page, besides, we consider every Post Master to whose office the paper is sent as an Agent, and beg the favor of them to act as such, taking out their commission or not, as they may choose. Our former travelling Agent, H. P. DOUGHTY, has recently written us, declining his agency for the F. & P., as he intends following other pursuits. He is, therefore, no longer an Agent. J. B. EARLE, Esq., of Waco, Texas, is an authorised Agent.

#### Missing Papers.

Some of our subscribers are still complaining that their papers do not regularly come to hand. This we regret as much as they possibly can do, but cannot help it. We know that we do our duty, and ought not to be responsible for the neglect or bad management of the mail department; yet if our friends will inform us, we most cheerfully send the missing numbers again, if on hand.

#### Editors' Table.

THE GENESEE FARMER.—We beg your pardon, brother Farmer, for not noticing your appearance in January, as you request, in our last. But never too late to do good! We *feel bound* to notice you, if for no other reason than that of your handsome Somerset over our head in your "brief summary of the monthly periodicals now published in different sections of the Union." (January No., page 34). Pray how come you to recollect there was such a paper as the Farmer and Planter, when asking for a "notice," and not when giving your "brief summary?" But reflections aside. We would say to our readers that the Genesee Farmer is one of our best Agricultural papers, and one that has greeted us monthly long before and since our humble sheet made its appearance. The Farmer is edited by Dr. DANIEL LEE and W. D. ALLIS, assisted by JOSEPH FROST, as Horticultural Editor. It is known to many of our readers that Dr. LEE's practical and scientific knowledge is not surpassed by that of any other Editor North or South. Rochester, N. Y., monthly, at 50 cents.

PUBLIC DOCUMENTS.—To Judge EVANS, and our District Representative, Col. ORR, we are indebted for several valuable public documents. Amongst others, the Appendix to the Congressional Globe, which we value highly. Col. ORR's speech on the French Spoliation Bill. In this speech, we doubt not, our friend has done more real service to the country than have a large majority of the members of Congress altogether throughout the whole session.

CORRESPONDENTS.—Some enquiries from our correspondents must lie over for this month. Shall be attended to anon.

For the Farmer and Planter.

#### Bone Fellons---Blind Staggers.

MR. EDITOR:—In the last number of the Farmer and Planter, I see "a cure for bone fellows," and as such information is often useful to the suffering, I will give you a remedy, which when used in the early stage of the disease, I know to be *infallible*: Take nearly equal parts of soft soap, spirits of turpentine and beeswax, and stew them together in a tin cup, stirring and mixing well; after the whole becomes liquid and hot, pulverize common table salt and stir in until it becomes thick enough for a poultice; put this on as hot as can be borne, and bind to the part, and nine times out of ten, no "core" will form. *Try it.*

I have also seen often in your valuable paper, remedies for "Blind Staggers" in horses. I believe that there are few diseases, either of man or beast, so little understood and so often mistreated. I lost many valuable animals with the above named disease, before I could do anything for it. The disease is very prevalent in



this western country, hence almost everybody has a "remedy;" and I tried all that I could hear of, without any success, until I lost one of the finest saddle animals I ever owned. I then determined to dissect and learn if I could, and having always heard that the brain was the principal part involved, I first took off the cap or scull covering the brain, and to my astonishment I found the brain perfectly sound. (I know the animal died with the "Blind Staggers"). I then examined the throat and windpipe, and found the throat covered with a yellowish coating; the stomach was much inflamed, and contained nothing but a "yellowish green," bilious matter; the liver was enlarged, and exhibited a bilious state; the intestines were inflated with wind to some extent, and the feces hard and every appearance of great costiveness; hence I came to the conclusion that the "Blind Staggers" in horses was nothing more or less than the fever, and determined to treat the next case accordingly, which I soon had the opportunity of doing. A mule was the subject—bad case—could stand up with difficulty—apparently blind—bowels and legs cold—had them rubbed with spirits turpentine—bled (*not to death* but) moderately—gave a heaping teaspoonful of calomel, (which is easily done either in a pill or molasses,) next morning, ten or twelve hours afterwards, Castor Oil or some other purgative, if the calomel has not worked freely. The result: I have not lost a case since this remedy has been used, and I think I am safe in saying that it will cure nine cases in ten if used immediately.

I have been thus particular because of the great difference of opinion on the subject. You can publish as much or as little of the above as you may think proper or useful. I may at some future time say something on the subject of "Botts" in horses, &c.

Very respectfully, JAS. E. HARRISON.  
Monroe County, Miss., February 14th, 1855.

REMARKS.—J. E. H. will accept our thanks for the above communication, on the diseases of our most useful and indispensable animal, the horse. The "Blind Staggers" is considered a dangerous, and in most instances fatal disease, and any new light on the subject, will surely be interesting to our readers. We know that the Blind Staggers is believed by most persons to be caused by inflammation of the brain; but there is such an intimate sympathy existing between the stomach and brain, that it would be difficult for most men to judge correctly from symptoms or external appearances, which of the two organs is most affected. Several years since, we lost most of our horses by

Blind Staggers. One we saved, as we supposed, by copious bleeding in the early stage of the disease. Another, supposing the brain to be the seat of the disease, after all other tried remedies had failed, we treated on the principal of counter-irritation, by elevating the head and pouring a tablespoonful of *spirits of turpentine* into each nostril. This animal on being turned loose, ran with her head against a tree with such force as to stun her so that she fell to the ground. She recovered, but was so sensitive to light that when led to the stable door there was much difficulty in getting her out for many days.—ED. F. & P.

For the Farmer and Planter.  
**Rescue Grass.**

MR. EDITOR:—I will now enclose you two dollars, the amount of subscription to the Farmer and Planter, due by S. C. B. and myself for the present year, and I sincerely hope your subscribers, generally, continue to give their support to your valuable paper. I am looking anxiously for your January number, in the hopes of seeing that some of your subscribers have been more successful than myself with the wonderful Rescue Grass. I have mine upon the best land I cultivate, and it bears no comparison with the rye on the adjoining quarter of an acre which was planted a month later than the Rescue. Thus far I give the preference to the rye, because it stands the cold as well, and grows faster. I have been cutting rye, planted about the 15th of October last, for a month past. The Rescue was planted in Sept., and is quite too short to cut at this time.

I remain, Sir, very respectfully, &c.

O. H.

REMARKS.—Thank you, friend O. H. Most of our old subscribers (stand by's) "stick to" us and support us so far as their own subscription goes, with now and then a *new one*; but the latter we regret to say to you, are like Angels visits. Occasionally one sends us up a list, however, that is truly refreshing—that in some degree revives our drooping spirits. But we fear "it is no go." March is now on us, and not a list has been offered for our premiums. Not one that will take even the lowest. This but too plainly shows the spirit of the South in sustaining agricultural papers. If we can't get up the wind to arouse this low-laying spirit, its all over with us; this year closes our humble labors, editorial. By becoming *operative* instead of *speculative*, we doubt not our labors will be much more adequately required.

We regret to hear that you have not been more successful with the "Rescue Grass." So far, we may say with you, our rye is quite superior, but we can't give it up yet. The ground on which ours was sown, hardly anything would succeed very well on. The Yellow Clover failed on the same lot, (which is our *experimentum cruces*.) failed to do what we expected.



But it was not a *fair* test. Anything that will grow on *that* lot, will do well anywhere this side of Buncombe. As a gentleman said in his address to our Agricultural Society, some years since, on wheat culture—"It grows best on rich land;" and so does almost everything else that we have tried, (not so of the Oregon Pea, some would say,) and so will the "Rescue." On rich calcarious soils, we cannot hesitate to believe it is *all* that has been said of it, but as a renovator of poor land without some help, we should place it with Red Clover, which we *do know* will succeed in the South, even, on *good* land.

For the Farmer and Planter.

#### Guano and Kittlewell's Salts.

MR. EDITOR:—These fertilizers so universally recommended to the planters, and extensively used in different parts of the South the past year, and the effects so varied, it is a duty that the planters and farmers *owe to each other* to give the results to the public, so we may come to correct conclusions whether they *will pay*. I purchased ten thousand lbs. of the Salts, and eight thousand lbs. of Guano, and applied the Salts at the rates of 100 lbs. per acre, with 80 lbs. Gypsum, and the result was entirely unsatisfactory. When I applied about three times the quantity named above, there was a decided benefit, but it costs more than it is worth to manure with. The Guano was applied, 80 lbs to the acre, with 5 bushels of Cotton seed—except 50 acres which had 40 lbs additional, sowed broadcast, which had a powerful influence on the growth and maturity of the bolls, and the yield was about eight hundred lbs. *per acre*. The stand was very bad, and I have no doubt if the stand had been good, it would have made from 1000 to 1200 lbs. *per acre*. The balance guanoed was also an indifferent stand, and the results not satisfactory, having made 600 lbs. to the acre. From the results of my experience, I am satisfied at the present price of cotton, it will not justify the planter in paying 60 dollars per ton, to put on cotton, corn or wheat. Although I am inclined to think it will pay better on grain than any thing else. I have 40 acres of wheat guanoed the present year, and from present appearances, it bids fair to do well. No planter can afford to pay 5 dollars rent to plant in cotton, in this country; and he that uses Guano at present prices, has to pay at least, that price, if he puts enough on his land to benefit his crop. Could we purchase Guano at \$30 per ton, I believe we could use it *to advantage*. Therefore, at present, I have concluded to dispense with the use of it. Had I expended the amount paid for fertilizers in ditching and embanking

my low grounds, the results would have been far different.

In conclusion I will here remark that the best manure for cotton, and the cheapest, (except stable manures,) that I have used, is *Gypsum and ashes*, less liable to be effected by drought, and certain to reimburse for time and expenditure in procuring and applying it to the land.

I am yours, &c., THOMAS B. BYRD.

N. B.—The Salts and Guano was applied to old land badly worn.

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#### NOTICE.

I WISH to call the attention of the public to the valuable improvement of Formand and Garlington's Patent Plow Stock, made altogether of Iron. It far surpasses any other kind now in use. I have purchased the right for Anderson District, and will sell the right to make by the piece, or shop-rights, or will furnish stocks ready made. Any person wishing to see them, can do so by calling at my shop at Pendleton.

JAMES HUNTER.

Pendleton January 13.

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## LIST OF PAYMENTS RECEIVED.

NAMES	POST OFFICES.	AM'T.	
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R S Harvin, Packsville,	"	1.	Thos McDill,
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J. C. Walton, Coleman's Roads,	"	1.	John Douglass, Blackstocks
S D Sanders, Cheraw,	"	1.	A B Douglass
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Thos B Glenn, Maybinton,	"	2.	Aldridge Green, Pleassnt Grove,
Capt J A Donald, Abbeville C. H. (vol 5)	"	1.	Wilks Quattlebaum, Orion, Ala.,
			J L & W P Lenoir,
			We have more receipts on hand, which will appear
			next month.